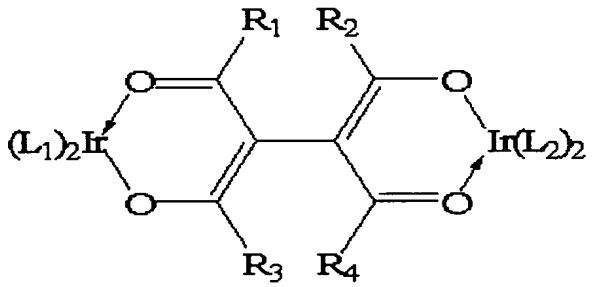
Listing of Claims:

Please amend the claims as follows. This Listing of Claims will replace all prior versions and listings of claims in the application.

CLAIMS

1. – 70. (Canceled)

71. (New) A method of forming an electroluminescent device comprising a first electrode, a second electrode, and an electroluminescent layer between the first and second electrodes, said method including the steps of forming said electroluminescent layer by vacuum evaporating onto a substrate an iridium compound having the general chemical formula:



wherein:

L_1 and L_2 are selected from the group consisting of phenyl pyridine and substituted phenyl pyridines; and,

R_1 to R_4, which may be the same or different, are selected from the group consisting of t-butyl groups; substituted aliphatic groups; substituted and unsubstituted aromatic, heterocyclic and polycyclic ring structures; fluorocarbon groups; and fluorine atoms.

72. (New) The method of claim 71 wherein R_1, R_2, R_3 and R_4 are selected from aromatic and heterocyclic alkoxy groups; aromatic and heterocyclic aryloxy groups; aromatic and heterocyclic carboxy groups; substituted and unsubstituted phenyl groups; substituted and unsubstituted fluorophenyl groups; substituted and unsubstituted biphenyl groups; substituted and unsubstituted phenanthrene groups; substituted and unsubstituted anthracene groups; substituted and unsubstituted naphthyl groups; substituted and unsubstituted fluorene groups; and carbazole groups.

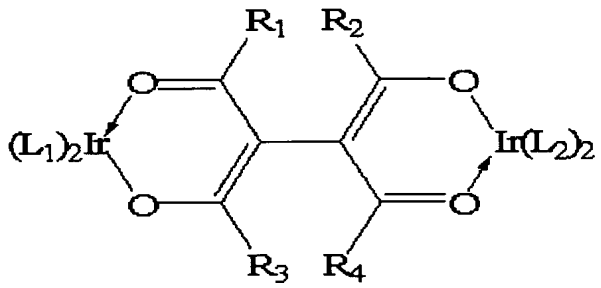
73. (New) The method of claim 71, wherein R_1 to R_4 are independently selected from the group consisting of phenyl, fluorophenyl, biphenyl and naphthyl.

74. (New) The method of claim 71, wherein L_1 and L_2 are each phenyl pyridine.

75. (New) The method of claim 71, including the step of forming the electroluminescent layer by vacuum evaporating the iridium compound onto a substrate together with a second electroluminescent compound to form an electroluminescent layer in which the iridium compound and the second electroluminescent compound are mixed.

76. (New) The method of claim 75, wherein the second electroluminescent compound is 4,4-bis(9-dicarbazolyl)-biphenyl (CBP).

77. (New) An electroluminescent device comprising a substrate, a first electrode, a second electrode, and an electroluminescent layer between the first and second electrodes, said electroluminescent layer comprising an electroluminescent iridium compound deposited on the substrate by vacuum evaporation, said iridium compound having the general chemical formula:



wherein:

L_1 and L_2 are selected from the group consisting of phenyl pyridine and substituted phenyl pyridines; and,

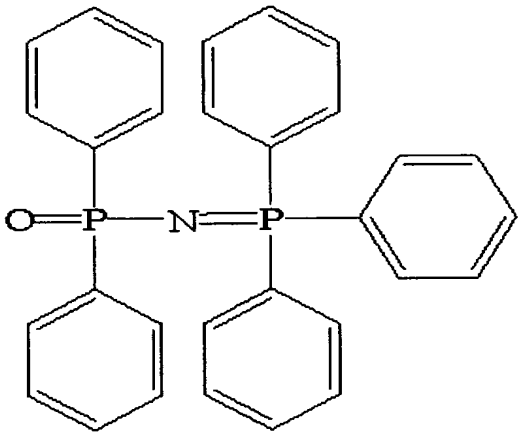
R_1 to R_4, which may be the same or different, are selected from the group consisting of t-butyl groups; substituted aliphatic groups; substituted and unsubstituted aromatic, heterocyclic and polycyclic ring structures; fluorocarbon groups; and fluorine atoms.

78. (New) The electroluminescent device of claim 77 wherein R_1, R_2, R_3 and R_4 are selected from aromatic and heterocyclic alkoxy groups; aromatic and heterocyclic aryloxy groups; aromatic and heterocyclic carboxy groups; substituted and unsubstituted phenyl groups; substituted and unsubstituted fluorophenyl groups; substituted and unsubstituted biphenyl groups; substituted and unsubstituted phenanthrene groups; substituted and

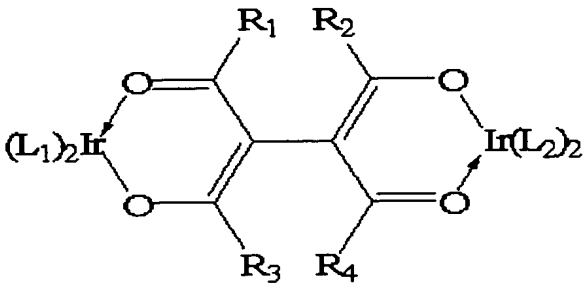
unsubstituted anthracene groups; substituted and unsubstituted naphthyl groups; substituted and unsubstituted fluorene groups; and carbazole groups.

79. (New) The electroluminescent device of claim 77 wherein said electroluminescent layer comprises said iridium compound as a first component and an electroluminescent europium complex as a second component, the two components either being mixed in a single layer or being in separate layers.

80. (New) The electroluminescent device of claim 79 wherein the europium complex component is $Eu(DBM)_3OPNP$ in which DBM is dibenzoyl methane and OPNP is



81. (New) A method for preparing an electroluminescent compound having the general chemical formula:

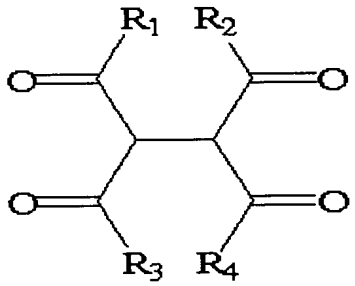


wherein:

L_1 and L_2 are selected from the group consisting of phenyl pyridine and substituted phenyl pyridines; and,

R_1 to R_4, which may be the same or different, are selected from the group consisting of t-butyl groups; substituted aliphatic groups; substituted and unsubstituted aromatic, heterocyclic and polycyclic ring structures; fluorocarbon groups; and fluorine atoms,

the method comprising the steps of reacting substituted tetrakis(2-phenylpyridine-C^2N') diiridium dichloride with a compound having the general chemical formula



wherein R_1 to R_4 are as defined above.

82. (New) The method of claim 81 wherein R_1, R_2, R_3 and R_4 are selected from aromatic and heterocyclic alkoxy groups; aromatic and heterocyclic aryloxy groups; aromatic and heterocyclic carboxy groups; substituted and unsubstituted phenyl groups; substituted

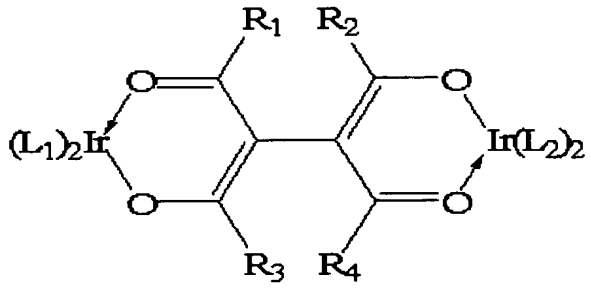
and unsubstituted fluorophenyl groups; substituted and unsubstituted biphenyl groups; substituted and unsubstituted phenanthrene groups; substituted and unsubstituted anthracene groups; substituted and unsubstituted naphthyl groups; substituted and unsubstituted fluorene groups; and carbazole groups.

83. (New) The method of claim 81 further comprising the step of vacuum evaporating the product of the reaction step onto a substrate to form a layer of the electroluminescent compound on the substrate.

84. (New) The method of claim 81, wherein the reaction step is carried out in the presence of sodium carbonate.

85. (New) The method of claim 81, wherein the reaction step is carried out in the presence of 2-ethoxyethanol.

86. (New) An electroluminescent iridium compound capable of being vacuum-evaporated onto a substrate for use as an electroluminescent layer, said compound having the general chemical formula:



wherein:

L_1 and L_2 are selected from the group consisting of phenyl pyridine and substituted phenyl pyridines; and,

R_1 to R_4, which may be the same or different, are selected from the group consisting of t-butyl groups; substituted aliphatic groups; substituted and unsubstituted aromatic, heterocyclic and polycyclic ring structures; fluorocarbon groups; and fluorine atoms.

87. (New) A compound according to claim 86 wherein R_1, R_2, R_3 and R_4 are selected from aromatic and heterocyclic alkoxy groups; aromatic and heterocyclic aryloxy groups; aromatic and heterocyclic carboxy groups; substituted and unsubstituted phenyl groups; substituted and unsubstituted fluorophenyl groups; substituted and unsubstituted biphenyl groups; substituted and unsubstituted phenanthrene groups; substituted and unsubstituted anthracene groups; substituted and unsubstituted naphthyl groups; substituted and unsubstituted fluorene groups; and carbazole groups.

88. (New) A compound according to claim 86, wherein R_1 to R_4 are selected from the group consisting of phenyl, fluorophenyl, biphenyl and naphthyl.

89. (New) A compound according to claim 86, which exhibits green electroluminescence.

90. (New) A compound according to claim 86 wherein L_1 and L_2 are each phenyl pyridine.